



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUN 9 2016

**VIA CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

R. Shawn Mendt, EHS Manager  
PPG Industries, Inc.  
440 College Park Drive  
Monroeville, PA 15146  
mendt@ppg.com

Re: Supplemental Request to Provide Information Pursuant to Section 114 of the Clean Air Act

Dear Mr. Mendt:

The enclosed supplemental information request is being issued to you pursuant to Section 114 of the Clean Air Act (CAA), 42 U.S.C. § 7414. The Environmental Protection Agency is seeking additional information concerning the PPG Industries Inc. float glass manufacturing facilities located in Carlisle, PA, Wichita Falls, TX, and Fresno, CA.

Under Section 114 of the CAA, EPA is authorized to require the submission of records, reports, and other information for the purpose of determining whether any violations of the CAA have occurred. In accordance with this authority, you are hereby served the enclosed Information Request, and required to provide the requested responses and documents within forty-five (45) days of receipt of this Request. See Enclosures 1 and 2 for the instructions, definitions, and Information Requests.

You must submit a copy of the full response to:

Christopher Williams  
Stationary Source Enforcement Branch  
Air Enforcement Division  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW, Mail Code 2442A  
Washington, DC 20460

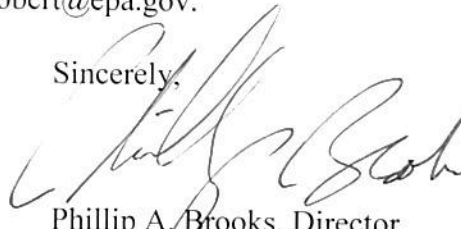
Failure to provide the required information in a timely manner may lead to civil action to obtain compliance or to recover a civil penalty in accordance with Section 113 of the CAA, 42 U.S.C. § 7413. EPA also has authority to seek criminal penalties from any person who knowingly makes any false statement, representation, or certification. Even if you fully comply with this letter, you may still be subject to administrative, civil, or criminal action as provided by the CAA.

You are entitled to assert a claim of business confidentiality, covering all or any required information, in the manner described at 40 C.F.R. § 2.203(b). See Enclosure 3 for instructions on assertion of business confidentiality claims. Note that emissions data, which includes information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of emission data, is not entitled to confidential treatment. Information subject to a claim of business confidentiality will be made available to the public only in accordance with the procedures set forth at 40 C.F.R. Part 2, Subpart B. Unless a confidentiality claim is asserted at the time the required information is provided, EPA may make this information available to the public without further notice to you.

This required submission of information is not subject to the approval requirements of the Paperwork Reduction Act of 1980, 44 U.S.C. §§ 3501, et seq.

Any technical questions regarding this Information Request should be directed to Christopher Williams, Office of Civil Enforcement, at (202) 564-7889, [williams.christopher@epa.gov](mailto:williams.christopher@epa.gov); for legal matters, contact Robert Klepp, Office of Civil Enforcement, at (202) 564-5805, [klepp.robert@epa.gov](mailto:klepp.robert@epa.gov).

Sincerely,



Phillip A. Brooks, Director  
Air Enforcement Division

Enclosures (3)

cc: Ray Magyar, EPA Region 6  
Bruce Augustine, EPA Region 3  
Kara Christenson, EPA Region 9

## **ENCLOSURE 1**

### **A. INSTRUCTIONS:**

- 1) Please provide a separate narrative response to each Information Request and subpart of an Information Request set forth in Enclosure 2 of this Information Request and precede each answer with the number of the Information Request to which it corresponds.
- 2) For each Information Request, identify each person responding to any Information Request contained in this Information Request on your behalf, as well as each person consulted in the preparation of a response.
- 3) For each Information Request, identify each document consulted, examined, or referred to in the preparation of the response or that contains information responsive to the Information Request, and provide a true and correct copy of each such document if not provided in response to another specific Information Request. Indicate on each document produced in response to this Information Request the number of the Information Request to which it corresponds.
- 4) If requested information or documents are not known or are not available to you at the time of your response to this Information Request, but later become known or available to you, you must supplement your response to EPA. Moreover, should you find at any time after submission of your response that any portion is or becomes false, incomplete, or misrepresents the facts; you must provide EPA with a corrected response as soon as possible.
- 5) Requested information can be submitted in electronic form if applicable.

For purposes of this Information Request, the definitions set forth in Section B shall apply and should be considered carefully by you in preparing your responses.

### **B. DEFINITIONS:**

- 1) "Document" means written documentation of any kind, including documentation solely in electronic form. It includes any document in the possession or control of PPG or the possession or control of any person or entity hired by PPG. A copy of a document rather than the original may be provided.
- 2) "Facility(ies)" means the PPG float glass manufacturing facility(ies) located in Carlisle, PA Wichita Falls, TX, and/or Fresno, CA, as specified.
- 3) The terms "person" or "persons" shall have the meaning set forth in Section 302(e) of the Act, 42 U.S.C. § 7602(e), and include an individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States and any officer, agent or employee thereof.

- 4) The terms "you" or "your", as used above and in each Information Request set forth in Enclosure 2 of this Information Request, refer to, and shall mean, [Recipient], including its subsidiaries, divisions, affiliates, predecessors, successors, assigns, and its former and present officers, directors, agents, employees, representatives, attorneys, consultants, accountants and all other persons acting on its behalf.



**ENCLOSURE 2**  
**INFORMATION REQUEST**

You are hereby required, in accordance with Section 114(a) of the Act, 42 U.S.C. § 7414(a), to provide the following information regarding the Facilities.

**I. For the Facility located in Wichita Falls, TX, provide:**

1. The date (mm/dd/yyyy) each furnace began shutdown for the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) and the day that fuel was no longer fired in each furnace prior to the rebrickings.
2. The date (mm/dd/yyyy) each furnace began start-up following the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2).
3. Copies of all engineering and cost analyses and project justifications, including internal and external correspondence relating to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2).
4. A list of all capital expenditures greater than \$10,000 incurred during the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2). The list should include the approximate date of each expenditure, a brief description of each expenditure, and the value of each expenditure in nominal dollars.
5. As-built drawings of each furnace prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) and following the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2).
6. State the following information for each furnace prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) and following the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2). Provide an explanation of how each value was calculated:
  - a. Maximum design rated capacity (tons/day) of the furnace alone;
  - b. Actual maximum capacity (tons/day) of the furnace, taking into account any physical or operational constraints;
  - c. Holding capacity (tons);
  - d. Physical size of the furnace (length x width in feet, and depth in inches);
  - e. Actual maximum capacity (tons/hour);
  - f. Maximum pull achieved on the furnace for each campaign, as it is known commonly in the industry, and anticipated maximum pull achieved for the furnaces post rebrickings (tons/day);
  - g. Average monthly tons of glass produced during the campaign (tons/day);
  - h. The maximum heat input capacity per hour of the furnace for all heat sources, including but not limited to fuel firing and electric boost;

- i. The maximum heat input capacity of the furnace from fuel firing (mmBtu/hour). List the type(s) of fuel used and specify the separate firing capacities for each type of fuel used. Also, identify the fuels the furnace was or is permitted to use and which fuel was or is considered the primary fuel;
  - j. The maximum heat input capacity from electric boost (KVA);
  - k. The ratio of the refiner area to the melting area;
  - l. The ratio of the port area to the melting area;
  - m. The ratio of the checker volume (volume in the regenerators) to the melting area;
  - n. The number of burners;
  - o. The burner configuration;
  - p. The make and manufacturer and throughput of each burner; and
  - q. If oxygen is used in any burners, the number of burners, positions of burners, the amount of oxygen used in each burner, and the purpose of the oxygen use.
7. Provide a description of the product types made in each furnace prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) and following the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2). Include a breakdown of what percentage of the year the furnace makes or will make (a) low iron glass and (b) tinted glass.
  8. Identify and describe each piece of air emission control equipment and/or each pollution reduction practice used at each furnace prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2). Provide the date of installation of the control equipment or implementation of the practice, the date of initial operation, and the dates of shutdown or decommissioning, if applicable. Describe in detail how each existing and former emission control equipment or reduction practice limits air emissions from each source, and how effectively (in terms of removal efficiency, capture efficiency, distribution efficiency, etc.) each air emission is limited by the corresponding equipment or practice. Please provide data to support the answers.
  9. Provide a list of all equipment downstream of the furnaces that have been replaced during the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) or within 5 years following the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2).
  10. Provide the following information for each furnace :
    - a. Actual annual production of glass in tons per year beginning 10 years prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) to the present (include a description of how the pull is calculated)
    - b. Actual annual emissions of NO<sub>x</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>SO<sub>4</sub>, PM, PM<sub>10</sub> and PM<sub>2.5</sub> (in tons per year) beginning 10 years prior to the date construction commenced on the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) to the present, as measured by a Continuous Emission Monitoring System (CEMS). Where a CEMS isn't available, provide the best estimate of emissions and include the basis for the estimate and a copy of any information relied upon in estimating emissions.



11. Provide the following annual records for the furnaces prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) to the present:
  - a. natural gas consumption;
  - b. average percent sulfur in raw materials;
  - c. electric boost consumption; and
  - d. average percent cullet.
12. Provide a list of any and all emissions testing that occurred on the furnace for NO<sub>x</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>SO<sub>4</sub>, PM, PM<sub>10</sub> and PM<sub>2.5</sub> (in tons per year) beginning 10 years prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) until the present. Emission testing includes, but is not limited to, compliance testing, engineering testing, and testing for general information. Also provide a copy of any report that resulted from the emission tests which meet the above criteria. Indicate whether such report was shared with the local and/or state permitting agency. A copy of the summary pages from each report is sufficient, so long as the summary provides emission rates as well as all the operating parameters recorded during the tests, including, but not limited to, the electric boost usage (k/W), fuel usage (mmBTU/hour), glass pull rate (tons/hour), raw materials type and feed rate (l/hour), percent sulfur in raw material mix, type of glass, bridgewall temperature (degrees F), oxygen flow rate (dscf/min), purity of oxygen, air flow rate (dscf/min), air/fuel ration and percent cullet usage.
13. For each test report provided in response to question #12, provide the following daily average data (preferably in Microsoft Excel format) for the tested furnace for each day during the 2 months before and the 2 months after the date of the source test: the electric boost usage (k/W), fuel usage (mmBTU/hour), glass pull rate (tons/hour), raw materials type and feed rate (l/hour), percent sulfur in raw material mix, color/type of glass, bridgewall temperature (degrees F), oxygen flow rate (dscf/min), purity of oxygen, air flow rate (dscf/min), air/fuel ration and percent cullet usage.
14. Provide copies of all feasibility or engineering studies conducted beginning 5 years prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2) to the present that describes present and future production potential for the Facility as a whole and for individual process units or pieces of equipment, including both existing equipment prior to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2), and new equipment added following the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2).
15. Provide copies of all air permit applications, correspondence, and supporting documentation, including all new source review analyses or discussion of the applicability of new source review submitted to the local and/or state permitting agency relating to the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2).
16. Provide the dates of any and all calculations of "projected actual emissions" (as defined in 40 CFR § 52.21 (b)(41)) for the furnace before PPG commenced construction on the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2), as well as copies of each

projection and any data used to support the projections (such as historical usage or emissions data).

17. Did PPG receive or obtain emissions reduction credit or any other type of emissions credit for the conversion of Furnace 4-1 from a regenerative air-fired furnace to an oxyfuel furnace? If so, describe the types of credits and the quantity obtained.
18. Describe the Lip Replacements completed on or around January 25, 2012 and February 11, 2014 at furnace 4-1. Provide copies of all feasibility or engineering studies, cost analyses, and project justifications, including internal and external correspondence relating to the Lip Replacements.

## **II. For the Facility located in Carlisle, PA, provide:**

1. The date (mm/dd/yyyy) that the furnace began shutdown for the left generator rebricking that occurred in 2015 (Furnace 6-2) and the day that fuel was no longer fired in the furnace prior to the rebricking.
2. The date (mm/dd/yyyy) that the furnace began start-up following the left generator rebricking that occurred in 2015 (Furnace 6-2).
3. Copies of all engineering and cost analyses and project justifications, including internal and external correspondence relating to the left generator rebricking that occurred in 2015 (Furnace 6-2).
4. A list of all capital expenditures greater than \$10,000 incurred during the left generator rebricking that occurred in 2015 (Furnace 6-2). The list should include the approximate date of each expenditure, a brief description of each expenditure, and the value of each expenditure in nominal dollars.
5. As-built drawings of the furnace prior to the left generator rebricking that occurred in 2015 (Furnace 6-2) and following the left generator rebricking that occurred in 2015 (Furnace 6-2).
6. State the following information for the furnace prior to the left generator rebricking that occurred in 2015 (Furnace 6-2) and following the left generator rebricking that occurred in 2015 (Furnace 6-2). Provide an explanation of how each value was calculated:
  - a. Maximum design rated capacity (tons/day) of the furnace alone;
  - b. Actual maximum capacity (tons/day) of the furnace, taking into account any physical or operational constraints;
  - c. Holding capacity (tons);
  - d. Physical size of the furnace (length x width in feet, and depth in inches);
  - e. Actual maximum capacity (tons/hour);



- f. Maximum pull achieved on the furnace for each campaign, as it is known commonly in the industry, and anticipated maximum pull achieved for the furnaces post rebricking (tons/day);
  - g. Average monthly tons of glass produced during the campaign (tons/day);
  - h. The maximum heat input capacity per hour of the furnace for all heat sources, including but not limited to fuel firing and electric boost;
  - i. The maximum heat input capacity of the furnace from fuel firing (mmBtu/hour). List the type(s) of fuel used and specify the separate firing capacities for each type of fuel used. Also, identify the fuels the furnace was or is permitted to use and which fuel was or is considered the primary fuel;
  - j. The maximum heat input capacity from electric boost (KVA);
  - k. The ratio of the refiner area to the melting area;
  - l. The ratio of the port area to the melting area;
  - m. The ratio of the checker volume (volume in the regenerators) to the melting area;
  - n. The number of burners;
  - o. The burner configuration;
  - p. The make and manufacturer and throughput of each burner; and
  - q. If oxygen is used in any burners, the number of burners, positions of burners, the amount of oxygen used in each burner, and the purpose of the oxygen use.
7. Provide a description of the product types made in the furnace prior to the left generator rebricking that occurred in 2015 (Furnace 6-2) and following the left generator rebricking that occurred in 2015 (Furnace 6-2). Include a breakdown of what percentage of the year the furnace makes or will make (a) low iron glass, and (b) tinted glass.
  8. Identify and describe each piece of air emission control equipment and/or each pollution reduction practice used at the furnace prior to the left generator rebricking that occurred in 2015 (Furnace 6-2). Provide the date of installation of the control equipment or implementation of the practice, the date of initial operation, and the dates of shutdown or decommissioning, if applicable. Describe in detail how each existing and former emission control equipment or reduction practice limits air emissions from each source, and how effectively (in terms of removal efficiency, capture efficiency, distribution efficiency, etc.) each air emission is limited by the corresponding equipment or practice. Please provide data to support the answers.
  9. Provide a list of all equipment downstream of the furnace that have been replaced during the left generator rebricking that occurred in 2015 (Furnace 6-2) or within 5 years following the left generator rebricking that occurred in 2015 (Furnace 6-2).
  10. Provide the following information:
    - a. Actual annual production of glass in tons per year beginning 10 years prior to the left generator rebricking that occurred in 2015 (Furnace 6-2) to the present (include a description of how the pull is calculated).

- b. Actual annual emissions of NO<sub>x</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>SO<sub>4</sub>, PM, PM<sub>10</sub> and PM<sub>2.5</sub> (in tons per year) beginning 10 years prior to the date construction commenced on the left generator rebricking that occurred in 2015 (Furnace 6-2) to the present, as measured by a Continuous Emission Monitoring System (CEMS). Where a CEMS isn't available, provide the best estimate of emissions and include the basis for the estimate and a copy of any information relied upon in estimating emissions.
11. Provide the following annual records for the furnace prior to the left generator rebricking that occurred in 2015 (Furnace 6-2) to the present:
  - a. natural gas consumption;
  - b. average percent sulfur in raw materials;
  - c. electric boost consumption; and
  - d. average percent cullet.
12. Provide a list of any and all emissions testing that occurred on the furnace for NO<sub>x</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>SO<sub>4</sub>, PM, PM<sub>10</sub> and PM<sub>2.5</sub> (in tons per year) beginning 10 years prior to the left generator rebricking that occurred in 2015 (Furnace 6-2) until the present. Emission testing includes, but is not limited to, compliance testing, engineering testing, and testing for general information. Also provide a copy of any report that resulted from the emission tests which meet the above criteria. Indicate whether such report was shared with the local and/or state permitting agency. A copy of the summary pages from each report is sufficient, so long as the summary provides emission rates as well as all the operating parameters recorded during the tests, including, but not limited to, the electric boost usage (k/W), fuel usage (mmBTU/hour), glass pull rate (tons/hour), raw materials type and feed rate (l/hour), percent sulfur in raw material mix, type of glass, bridgewall temperature (degrees F), oxygen flow rate (dscf/min), purity of oxygen, air flow rate (dscf/min), air/fuel ration and percent cullet usage.
13. For each test report provided in response to question #12, provide the following daily average data (preferably in Microsoft Excel format) for the tested furnace for each day during the 2 months before and the 2 months after the date of the source test: the electric boost usage (k/W), fuel usage (mmBTU/hour), glass pull rate (tons/hour), raw materials type and feed rate (l/hour), percent sulfur in raw material mix, color/type of glass, bridgewall temperature (degrees F), oxygen flow rate (dscf/min), purity of oxygen, air flow rate (dscf/min), air/fuel ration and percent cullet usage.
14. Provide copies of all feasibility or engineering studies conducted beginning 5 years prior to the left generator rebricking that occurred in 2015 (Furnace 6-2) to the present that describes present and future production potential for the Facility as a whole and for individual process units or pieces of equipment, including both existing equipment prior to the left generator rebricking that occurred in 2015 (Furnace 6-2), and new equipment added following the left generator rebricking that occurred in 2015 (Furnace 6-2).
15. Provide copies of all air permit applications, correspondence, and supporting documentation, including all new source review analyses or discussion of the applicability of new source



review submitted to the local and/or state permitting agency relating to the left generator rebricking that occurred in 2015 (Furnace 6-2).

16. Provide the dates of any and all calculations of "projected actual emissions" (as defined in 40 CFR § 52.21 (b)(41)) for the furnace before PPG commenced construction on the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2), as well as copies of each projection and any data used to support the projections (such as historical usage or emissions data).
17. Describe the Lip Replacements completed on or around April 15, 2010 and March 19, 2014 for Furnace 6-1, and on or around April 5, 2013 for Furnace 6-2. Provide copies of all feasibility or engineering studies, cost analyses, and project justifications, including internal and external correspondence relating to the Lip Replacements.

### **III. For the Facility located in Fresno, CA, provide:**

1. The date (mm/dd/yyyy) Furnace 15-2 began shutdown for the rebricking that occurred, or is occurring, in 2016 and the day that fuel was no longer fired in the furnace prior to the rebricking.
2. The date (mm/dd/yyyy), or anticipated date, that Furnace 15-2 began, or will begin, start-up following the rebricking that occurred, or is occurring, in 2016.
3. Copies of all engineering and cost analyses and project justifications, including internal and external correspondence relating to the rebricking of Furnace 15-2 that occurred, or is occurring, in 2016.
4. A list of all capital expenditures greater than \$10,000 incurred during the rebricking of Furnace 15-2 that has occurred, or is occurring, in 2016. The list should include the approximate date of each expenditure, a brief description of each expenditure, and the value of each expenditure in nominal dollars.
5. As-built drawings of each furnace prior to the rebricking of Furnace 15-2 that has occurred, or is occurring, in 2016, and following the rebricking of Furnace 15-2 that has occurred, or is occurring, in 2016.
6. State the following information for Furnace 15-2 prior to the rebricking that has occurred, or is occurring in 2016, and provide the information, or amounts, anticipated following the rebricking that has occurred, or is occurring in 2016. Provide an explanation of how each value was calculated:
  - a. Maximum design rated capacity (tons/day) of the furnace alone;
  - b. Actual maximum capacity (tons/day) of the furnace, taking into account any physical or operational constraints;
  - c. Holding capacity (tons);



- d. Physical size of the furnace (length x width in feet, and depth in inches);
  - e. Actual maximum capacity (tons/hour);
  - f. Maximum pull achieved on the furnace for each campaign, as it is known commonly in the industry, and anticipated maximum pull achieved for the furnaces post rebricking (tons/day);
  - g. Average monthly tons of glass produced during the campaign (tons/day);
  - h. The maximum heat input capacity per hour of the furnace for all heat sources, including but not limited to fuel firing and electric boost;
  - i. The maximum heat input capacity of the furnace from fuel firing (mmBtu/hour). List the type(s) of fuel used and specify the separate firing capacities for each type of fuel used. Also, identify the fuels the furnace was or is permitted to use and which fuel was or is considered the primary fuel;
  - j. The maximum heat input capacity from electric boost (KVA);
  - k. The ratio of the refiner area to the melting area;
  - l. The ratio of the port area to the melting area;
  - m. The ratio of the checker volume (volume in the regenerators) to the melting area;
  - n. The number of burners;
  - o. The burner configuration;
  - p. The make and manufacturer and throughput of each burner; and
  - q. If oxygen is used in any burners, the number of burners, positions of burners, the amount of oxygen used in each burner, and the purpose of the oxygen use.
7. Provide a description of the product types made in Furnace 15-2 prior to the rebricking that occurred, or is occurring, in 2016 and the anticipated production types following the rebricking that occurred, or is occurring, in 2016. Include a breakdown of what percentage of the year the furnace makes or will make (a) low iron glass and (b) tinted glass.
  8. Identify and describe each piece of air emission control equipment and/or each pollution reduction practice used at Furnace 15-2 prior to the rebricking that has occurred, or is occurring, in 2016. Provide the date of installation of the control equipment or implementation of the practice, the date of initial operation, and the dates of shutdown or decommissioning, if applicable. Describe in detail how each existing and former emission control equipment or reduction practice limits air emissions from each source, and how effectively (in terms of removal efficiency, capture efficiency, distribution efficiency, etc.) each air emission is limited by the corresponding equipment or practice. Please provide data to support the answers.
  9. Provide a list of all equipment downstream of Furnace 15-2 that have been or is anticipated to be replaced during the rebricking that has occurred, or is occurring, in 2016.
  10. Provide the following information for each furnace:
    - a. Actual annual production of glass in tons per year beginning 10 years prior to the rebricking of Furnace 15-2 that has occurred, or is occurring, in 2016 to the present (include a description of how the pull is calculated);

- b. Actual annual emissions of NO<sub>x</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>SO<sub>4</sub>, PM, PM<sub>10</sub> and PM<sub>2.5</sub> (in tons per year) beginning 10 years prior to the date construction commenced on the rebricking that has occurred, or is occurring, in 2016 to the present, as measured by a Continuous Emission Monitoring System (CEMS). Where a CEMS isn't available, provide the best estimate of emissions and include the basis for the estimate and a copy of any information relied upon in estimating emissions.
11. Provide the following annual records for Furnace 15-2 prior to the rebricking that has occurred, or is occurring, in 2016 to the present.
  - a. natural gas consumption;
  - b. average percent sulfur in raw materials;
  - c. electric boost consumption; and
  - d. average percent cullet.
12. Provide a list of any and all emissions testing that occurred on Furnace 15-2 for NO<sub>x</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>SO<sub>4</sub>, PM, PM<sub>10</sub> and PM<sub>2.5</sub> (in tons per year) beginning 10 years prior to the rebricking that has occurred, or is occurring, in 2016 to the present. Emission testing includes, but is not limited to, compliance testing, engineering testing, and testing for general information. Also provide a copy of any report that resulted from the emission tests which meet the above criteria. Indicate whether such report was shared with the local and/or state permitting agency. A copy of the summary pages from each report is sufficient, so long as the summary provides emission rates as well as all the operating parameters recorded during the tests, including, but not limited to, the electric boost usage (k/W), fuel usage (mmBTU/hour), glass pull rate (tons/hour), raw materials type and feed rate (l/hour), percent sulfur in raw material mix, type of glass, bridgewall temperature (degrees F), oxygen flow rate (dscf/min), purity of oxygen, air flow rate (dscf/min), air/fuel ration and percent cullet usage.
13. For each test report provided in response to question #12, provide the following daily average data (preferably in Microsoft Excel format) for the tested furnace for each day during the 2 months before and the 2 months after the date of the source test: the electric boost usage (k/W), fuel usage (mmBTU/hour), glass pull rate (tons/hour), raw materials type and feed rate (l/hour), percent sulfur in raw material mix, color/type of glass, bridgewall temperature (degrees F), oxygen flow rate (dscf/min), purity of oxygen, air flow rate (dscf/min), air/fuel ration and percent cullet usage.
14. Provide copies of all feasibility or engineering studies conducted beginning 5 years prior to the rebricking that has occurred, or is occurring, in 2016 to the present that describes present and future production potential for the Facility as a whole and for individual process units or pieces of equipment, including both existing equipment prior to the 2016 rebricking of Furnace 15-2, and new equipment anticipated to be added following the 2016 rebricking of Furnace 15-2.
15. Provide copies of all air permit applications, correspondence, and supporting documentation, including all new source review analyses or discussion of the applicability of new source

review submitted to the local and/or state permitting agency relating to the rebricking of Furnace 15-2 that has occurred, or is occurring, in 2016.

16. Provide the dates of any and all calculations of “projected actual emissions” (as defined in 40 CFR § 52.21 (b)(41)) for the furnace before PPG commenced construction on the rebrickings that occurred in 2010 (Furnace 4-1) and 2013-14 (Furnace 4-2), as well as copies of each projection and any data used to support the projections (such as historical usage or emissions data).
17. Describe the Lip Replacements completed on or around June 3, 2009 and March 31, 2015 for Furnace 15-2. Provide copies of all feasibility or engineering studies, cost analyses, and project justifications, including internal and external correspondence relating to the Lip Replacements.



**ENCLOSURE 3**  
**CONFIDENTIAL BUSINESS INFORMATION ASSERTION AND**  
**SUBSTANTIATION REQUIREMENTS**

**A. Assertion Requirements**

You may assert a business confidentiality claim covering all or part of the information requested in response to this information request, as provided in 40 C.F.R. Section 2.203(b). You may assert a business confidentiality claim covering such information by placing on (or attaching to) the information you desire to assert a confidentiality claim, at the time it is submitted to the EPA, a cover sheet, stamped, or typed legend (or other suitable form of notice) employing language such as "trade secret" or "proprietary" or "company confidential." Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by the EPA. If you desire confidential treatment only until a certain date or until the occurrence of a certain event, the notice should so state. Information covered by such a claim will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in Section 114(c) of the Clean Air Act (the Act) and 40 C.F.R. Part 2. The EPA will construe the failure to furnish a confidentiality claim with your response to the attached letter as a waiver of that claim, and the information may be made available to the public without further notice to you.

**B. Substantiation Requirements**

All confidentiality claims are subject to the EPA verification in accordance with 40 C.F.R. Part 2, subpart B. The criteria for determining whether material claimed as confidential is entitled to such treatment are set forth at 40 C.F.R. Sections 2.208 and 2.301, which provide, in part, that you must satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; that the information is not and has not been reasonably obtainable by legitimate means without your consent; and the disclosure of the information is likely to cause substantial harm to your business's competitive edge.

Pursuant to 40 C.F.R. Part 2, subpart B, the EPA may at any time send you a letter asking you to substantiate fully your CBI claim. If you receive such a letter, you must provide the EPA with a response within the number of days set forth in the EPA request letter. Failure to submit your comments within that time would be regarded as a waiver of your confidentiality claim or claims, and the EPA may release the information. If you receive such a letter, the EPA will ask you to specify which portions of the information you consider confidential. You must be specific by page, paragraph, and sentence when identifying the information subject to your claim. Any information not specifically identified as subject to a confidentiality claim may be disclosed without further notice to you. For each item or class of information that you identify as being subject to CBI, you must answer the following questions, giving as much detail as possible, in accordance with 40 C.F.R. 2.204(e):

1. What specific portions of the information are alleged to be entitled to confidential treatment? For what period of time do you request that the information be maintained as confidential, until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to the EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question #1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, explain whether and why disclosure of the information would tend to lessen the availability to the EPA of similar information in the future.
8. Any other issue you deem relevant.

Please note that emission data provided under Section 114 of the Act, 42 U.S.C. Section 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B.



Emission data means, with reference to any source of emission of any substance into the air:

(A) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;

(B) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of the emissions which, under an applicable standard or limitation, the source was authorized to emit (including, to the extent necessary for such purposes, a description of the manner and rate of operation of the source); and

(C) A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. Sections 2.301(a)(2)(i)(A), (B) and (C).

If you receive a request for a substantiation letter from the EPA, you bear the burden of substantiating your confidentiality claim. Conclusory allegations will be given little or no weight in the determination. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.